NORTH AMERICAN TECHNOLOGY AND INDUSTRIAL BASE ORGANIZATION

NATIBO

Operations & 3 Year Business Plan



. . . A Forum for Cooperation



Outline

- Background
- Organization
- NATIBO Products & Services
 - Memorandum of Understanding
 - Studies & Assessments
 - Advocacy Activities
- Work Plans
- Summary

A Forum for



Forum for

Background

- Joint Canadian DND US DoD organization
- Based on 1985 "Shamrock Summit" pledge by President Reagan and Prime Minister Mulroney
- 1987 NATIBO Charter with 1994, 1997 revisions
 - "promote...and...execute...DoD and DND technology and industrial base programs and policies"
 - "foster cooperation...in development of coordinated technology and IB policies...that promote the integration of the defense and commercial industrial sector"
 - "ensure that North American technology and IB considerations are taken into account during US or Canadian military or civilian planning emergencies





Mission

In support of North American national security, the NATIBO facilitates technology and industrial base efforts between the U.S. and Canadian Defense Departments



Background

- NATIB Memorandum of Understanding (MOU) signed May 2001
- Covers NATIBO Activities
 - Coordination of technology & industrial base activities
 - Development and evaluation of demonstrators/prototypes
 - Integration of defense & commercial industrial sectors
 - Technology insertion and industrial base data projects
 - Studies/Assessments
- Facilitates Information Exchange, Working Groups and Project Arrangements
 - MOU allows assignment of Cooperative Project Personnel and contracting on behalf of the other nation



Organization Steering Committee

Appointment

- "Each Participant in the NATIBO MOU will appoint its national Steering Committee (SC) Co-Chair"
- "Each Participant (through its MOU Co-Chair) will select members of the NATIBO MOU SC"

Responsibilities

- Meet no less than annually
- Approval authority for Working Groups and Project Arrangements under the NATIBO MOU
- Advocacy and education
- Developing MOU processes, monitoring their effectiveness and recommending/implementing improvements

Resources

Personnel are assigned (no dedicated support)
No budgeted funding line in place (funding provided by participants on a project-by-project basis



Organization **Steering Committee - Principals**



Canada

Co-Chair: DND (DG **International & Industry** Programs)
U.S

Co-Chair: DUSD (Office of **Technology Transition)**

Army

Navy

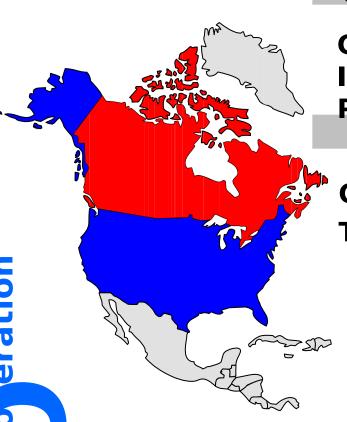
Air Force

Marine Corps

Missile Defense Agency

Defense Logistics Agency

DCMA

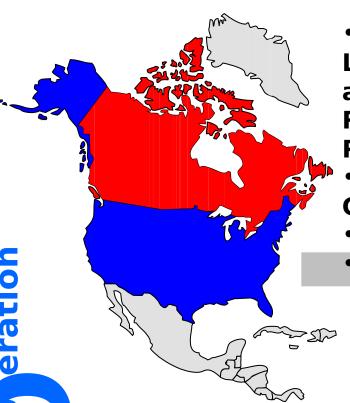




Organization **Steering Committee - Observers**

Canada





- DND: Canadian Defense Liaison Staff (Washington) and Director Industry Relations, Analysis and Policy/DGIIP
- Technology Partnership
 Canada
- Industry Canada
- ்டு agadian Commercial Corp.
- DHS
- Department of Commerce
- DUSD(AT&L), International Cooperation



Organization **Secretariat**

Appointment

- Selected by both Participants in support of the NATIBO MOU
- US AMSAA has been NATIBO Secretariat since 1987
- Secretariat is currently staffed by DoD (jointly funded by Services and DND)

Responsibilities

- Maintain all NATIBO related documentation and correspondence
- MOU details Secretariat responsibilities including keeping an inventory of all project background and foreground information exchanged between the participants



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Organization Business Development Working Group (BDWG)

- NATIBO Steering Committee created BDWG to:
 - Identify areas for collaborative activities
 - Promote and facilitate the use of the MOU for executing collaborative project arrangements
 - Assist potential users in developing and staffing the documents necessary to initiate an international project arrangement
- BDWG Points of Contact:
 - US Army natibo@army.mil
 - US Navy natibo@navy.mil
 - US Air Force natibo@af.mil
 - USMC natibo@usmc.mil
 - OSD natibo@osd.mil
 - DND natibo@forces.gc.ca



Information Exchange

- Includes reports, data bases
- WGs must submit list of exchanged documents to Secretariat on annual basis

Controlled/Classified

- Controlled Unclassified: Must be marked.
 Limited to Project Information use only.
- Classified: Up to SECRET. Must comply with Department Guidelines and Procedures



A Forum for

Products & Services Memorandum of Understanding (MOU)

Working Groups

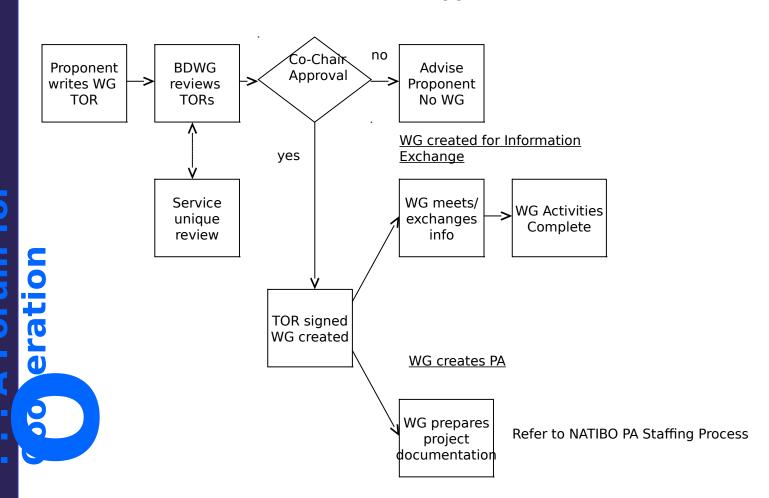
- "Sub-committees and WGs, ... may be established by the SC with concurrence of the participants. They will be established to address specific areas of concern and propose courses of action to the SC for assigned tasks"
- Require approved Terms of Reference (TOR)
- Provide annual status to Steering Committee

Terms of Reference:

- Defines intent to work under the NATIBO MOU
- Formally establishes a Working Group
- Identifies who is involved
- Provides a scope of activity
- Outlines any specific responsibilities
- Obtains Co-Chair approval for the effort
- Format and example available on NATIBO Website



Overall NATIBO TOR Approval Process





Current Working Groups & Date Established

- Light Armored Vehicle July 2001
- Fuel Cell Oct 2001
- Gas Turbine Engine IBA July 2002*
- First Responder Technology Dec 2002*
- Soldier System Technology Jan 2003
- Future Fire Control Systems Jan 2003
 - Med Log Vehicle Replacement Mar 2003
 - Tactical Communication & Apr 2004
 - **Info Systems Modeling**
 - Homeland Defense Apr 2005

* TOR concluded, term expired





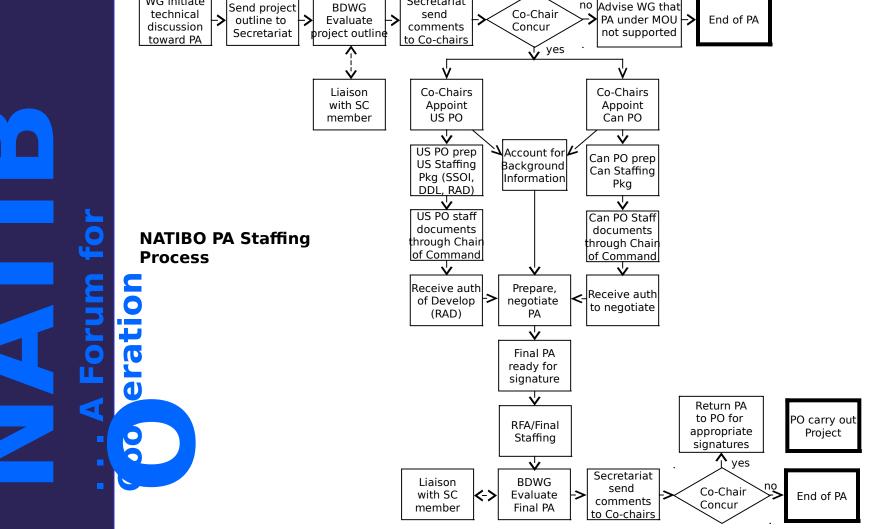
Project Arrangements

- "Leverage resources through cost sharing and economies of scale afforded through coordinated studies and projects"
- Historically funded by mutually acceptable amounts from Services and DND
- "Each Participant will bear its equitable share of the total estimated cost of each NATIB PA and will receive an equitable share of the results, in accordance with the provisions of this MOU and the applicable NATIB PA."
 - Equitability is evaluated on a case-by-case basis
 - Equitability issues are part of the project/PA negotiation process



WG initiate

Products & Services Memorandum of Understanding (MOLL)



Secretariat



History

- Conceptual framework for "Technology Base Enhancement Program" initiated in 1991
- Program formalized in 1992
- Joint investment thru FY04, approx. \$10M

Scope

- Survey North American technology and industrial base capabilities
- Analyze technology maturity and to what extent it has transitioned to a production environment
- Identify future trends/problems
- Develop roadmaps of strategic initiatives (both investment and non-investment)

Process

- Originated by NATIBO (usually by BDWG)
- Sponsored by NATIBO (may require establishing a Working Group)



Considerations for Selection:

- Critical to defense requirements
- Pervasive use by Services and Canadian Forces
- Commercial leverage ("Dual-use")
- Status of technology vis-à-vis international competition
- Force multiplier
- Need for government action
- Affordability of the technology
- High potential payback from minimum resources



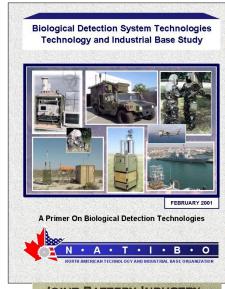
Supplier Relationships Foreign Dependency **Defined Process leads to Reports** Logistics **Production Forecasts Business Forecasts Define Team: Lead Plant Capacity** Organization, members, Technology Assessments technical expertise Financial Viability **Prepare/Define Technology** and/or Product Structure **Identify Potential Sources Select Potential Sources for On-site Visits Conduct On-site Interviews** and technology/industry Reviews **Analyze Data: Synthesize** findings, conclusion, and recommendations **Prepare Technology Base** Report w/ investment/non**investment Roadmaps**

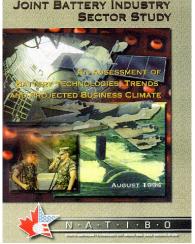


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Products & Services Studies and Assessments

- 1993 Metal Matrix Composites Study
- ◆ 1994 Battery Industry Study
- 1996 Collaborative Virtual Prototyping Study
- 1996 Ion Beam Processing Study
- 1998 Corrosion Detection Technologies Study
- ◆ 1999 Rechargeable Battery Study
- 2001 Biological Detection Systems Technology Study
- 2001 Collaborative Opportunities in DMSMS
- 2003 Small Gas Turbine Engine Study
 - 2004 First Responder Technologies Study







Streamlined Processes

- Goal: Improve responsiveness and relevance of technology and industrial base studies by reducing lead times from historical 18 months to less than 12
- More frequent use of organic (government)
 resources, e.g., DMSMS and First Responder studies
- Increased NATIBO sponsoring of proposed Joint Studies, e.g., Small GTE and ongoing Battery efforts

Resources

- Provided by participants
- Can include funding, manpower, or information



A Forum for

Products & Services Advocacy Activities

- Web site is primary communication media available to Co-Chairs
- Maintained by DTIC
- Planned Web site enhancements:
 - Reference sections on topics such as information exchange, NATIBO process charts
 - Links to OSD and Service International Program Offices (see next chart)
 - Highlight policies and procedures relevant to use of MOU
 - Knowledgeable points of contact
 - User's Group Area to post comments/testimonials
 - Information on other US/Canada Agreements and what's best to use when
 - Developing additional boilerplates (e.g., TOR for information exchange)



(1)

Products & Services Advocacy Activities

- Key Organizations/Sites (not inclusive)
 - DGIIP, Directorate of Continental Materiel Cooperation (www.forces.gc.ca/admmat/dgiip/dcmc)
 - International Cooperation, OUSD(AT&L) (www.acq.osd.mil/ic/)
 - Defense Security Cooperation Agency (www.dsca.osd.mil)
 - Defense Threat Reduction Agency (www.dtra.mil)
 - US Army Defense Exports and Cooperation (https://usasa.army.mil/DASA_DEC)
 - US Army Security Assistance Command (www.usasac.army.mil)
 - Naval Inventory Control Point, International Programs (www.navicp.navy.mil/of/ofhome)
 - Air Force Security Assistance Center (https://rock.afsac.wpafb.af.mil)
 - Deputy Under Secretary of the Air Force, International Affairs (www.safia.hq.af.mil)
 - Canadian Forces (www.airforce.forces.gc.ca , www.army.forces.gc.ca , www.navy.forces.gc.ca)



Forum for Fration

Products & Services Advocacy Activities

 Develop links between NATIBO site and Bi-National Planning Group





A Forum for

Products & Services Advocacy Activities

- Decision Matrix
 - Highlight "Best Vehicle" for cooperative activities
 - Provide background (possible web site links) on each

		Bilateral Defense Cooperation Tools									
	<u> </u>		<u> </u>			<u> </u>	'	<u> </u>			
	 		 '		'	 '					
Responsibility of		Science and Technology Establishments					Operational/Engineering/Materiel Establishments				
Activity Program/Agreement	Technical Research and Development Program	Technology Demonstration Program	Defence Industrial Research Program	Multilateral Master Information Exchange Agreement ***	i ne i ecnnicai		NATIBO	MDEAs **	S pecific MoUs	DoD Acquisition Framework	
Basic Science	Prodram	<u> </u>	Piodiam	Afreemen ****						FIGHEWOIK	
Applied Science		 					—				
Operational Requirements											
Concept of Operations										Concept Refinement	
Project Documentation			'		 ′	 '					
Engineering Development	<u> </u>		'							Technology Development	
Proof of Concept/Demonstration Production and Deployment	<u> </u>		<u> </u>	<u> </u>	ļ!	<u> </u>				System Development and Demonstration Production and Deployment	
Test and Evaluation			$\overline{}$							I I I I I I I I I I I I I I I I I I I	
Sustainment and Maintenance										Operations and Support	
Commercial Applications	'					<u> </u>					
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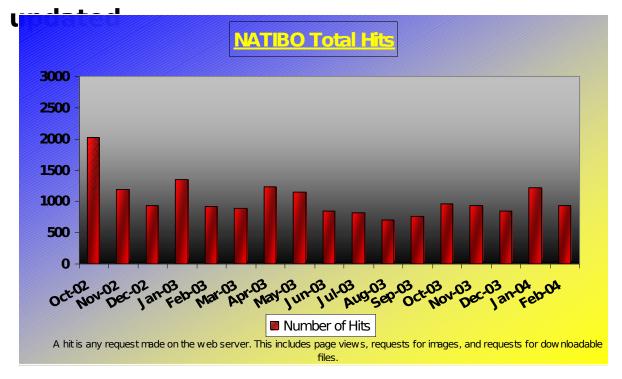
^{*} Agreement includes also UK, AU, NZ

^{**} Primarily used by the respective Navies



Products & Services Advocacy Activities

- RDT&E Infrastructure Information
 - Usage has been declining
 - Looking at integrating WVa HighTech
 Consortium Effort (www.navytechmatch.com)
 - Will transition to TechMatch as site is





Products & Services Advocacy Activities

NATIBO Conference Display

- Continue attendance at the Defense Manufacturing Conference (DMC) but update display to highlight what the MOU can do for that particular community, Dec 04
 - Update Completed
 - Presented at DMC 2004 in Las Vegas
- Return to a few of the large Service related conferences that are heavily attended by Program Mgrs
- Develop short promotional tool for desktop presentation



Products & Services Advocacy Activities

Other Mechanisms

- DAU presentations (S&T Managers Course), updating as appropriate
- Target specific population (Project Directors and Equipment Project Managers)
- Foreign Liaison Officers (FLOs)
 - Knowledgeable assets already in-place with access to broad customer community
 - Current use of FLOs still ad-hoc, some members leverage more than others
 - Maintaining consolidated US and CA FLOs directory (place on updated web site)



A Forum for

3 Year Plan Milestone Schedule

Activity	CY2005	CY2006	CY2007
Steering Committee Mtgs	Victoria, B.C.	· △	
Advocacy Plan	Veb-Site Update		
Potential Areas for DND/DOD Cooperation on Homeland Defense			
First Responder access to Military Equipment (Benefits & Challenges)	·	<u>·</u>	
MOU Revision			
Airborne Surveillance	Develor		
	Scope		



Work Plans #1 Advocacy Plan

Requirement

- Educate broader audience on NATIBO and MOU
- Provide more "How To" Information to potential MOU Customers

Expected End Item

- Upgraded Web-Site
 - Expanded Information on leveraging NATIBO products
 - Improved MOU tools & instructions
 - Processes that include links to DoD and DND International Program Offices
- Updated Display for Conferences

Resources

- DTIC support for Web-Site changes
- AF providing funds to maintain and transport display

Key Milestones

Complete display update: Nov 2004

Web-Site Redesign: June 2005



Work Plans

#2 Potential Areas for DND/DoDCooperation on Homeland Defense

Requirement

- Review Cooperative Homeland Defense Initiatives
- Focus on Technology, Acquisition and Logistics efforts (excludes CBRNE and Major Weapon Systems)
- Tied to DoD/DND roles in Civil Support and Aid to Civil Power
- Identify Gaps and Develop Recommendations

Expected End Item

- Presentation outlining process and findings
- Action Plans for Recommendations

Resources

DND: DGIIP & ADCA

- DoD: ASD(HD), AF & Army

Key Milestones

- Develop TOR for HD Working Group (signed April 2005)
- Jan 2005: Kick-Off Study

Jun 2005: Brief Preliminary Findings at SCM

Dec 2005: Release Final Report



Work Plans

#3 First Responder Access to Military Equipment

Requirement

- Identify military equipment of use to First Responders in various emergencies
- Assess current availability and location of identified equipment
- Identify constraints/barriers to issue and movement of equipment (both domestically and cross-border)

Expected End Item

- Presentation outlining process and findings
- Detailed Report
- Recommendations with Action Plans

Resources

- DND: DGIIP and ADCA
- DoD: ASD(HD), AF & Army

Key Milestones

- Jan 2005: Develop Resource Strategy
 - Jun 2005: Brief Preliminary Findings at SCM
 - Mar 2006: Release Final Report



Work Plans

#4 MOU Revision/Amendment

Requirement

- Review the NATIBO MOU for Amendment
- Include U.S. export control-related language, once finalized
- Add other improvements as required (e.g. Project Equipment Transfer (PET))

Expected End Item

 Revised MOU with new export control-related language and other improvements

Resources

DND: DGIIP

DoD: OUSD(AT&L)

Key Milestones

August 2005: Establish Ad Hoc MOU Review Group

Jun 2006: Provide MOU Review Group feedback at next SCM

2007: Finalize Changes



Work Plans #5 Airborne Surveillance

Requirement

- Increased Military Importance of Battle Space Awareness
- Multitude of Platform Options (Manned Aircraft, UAVs, Airships)
- Increased complexity of mission equipment, communications links, and information processing
- Application for Homeland Defense/Security

Expected End Item

- Reference Source & Decision Support Document
- Customer(s): OSD, DND, Services, DHS

Resources

- Air Force and DCMA Industrial Base Data & Information
- DND: DGIIP

Key Milestones

- 4th Qtr CY 2005: Air Force will research platforms, mission equipment, and industrial base (manufacturers) and prepare document from which scope of detailed effort can be developed
- Dec 2005: Develop TOR for Working Group

1stQtr CY2006: Initiate Study

Mid 2007: Complete Study



Measures of Success

Memorandum of Understanding

- Number of Working Groups/TORs in place
- Number of PAs executed/\$ associated with PAs
- Approval cycle times
- Number of projects successfully taken to completion
- New project starts
- Benefits to Government/Industry

Studies & Assessments

- Time to initiate and complete
- Number of recommendations acted on
- Number of new studies/assessments initiated
- Benefits to Government/Industry

Advocacy

Web site activityAttendance at display



Summary

- Proposed Business Plan represents an incremental approach to increasing NATIBO visibility in DoD and DND
- Business Plan reflects small to moderate increase in resources
- Emphasizes a focus on North American Security/Defense
 - Overall Goal is for NATIBO to provide increased value to the defense of both countries

